

Application Number 09/881,868
Docket: 010362
Responsive to Office Action mailed October 4, 2005

REMARKS

This Amendment is responsive to the Office Action dated October 4, 2005. Applicants have amended claims 34, 37, 38, 40, 41, 42, 45, 47, 48, 50, 51 and 52. Claims 34-53 remain pending.

Independent claims 34, 38 and 48 have been amended to provide consistency in claim terminology. In particular, these claims have been amended so that, for each of these independent claims, the "first unique identifier" refers to the identifier stored in the Subscriber Identity Module (SIM), and the "second unique identifier" refers to the identifier entered by a user of the wireless communication device (WCD) at initial power up. The terminology of "first" and "second" was formerly inconsistent between the different sets of claims.

Independent claims 34, 38 and 48 have also been amended to further clarify differences between Applicants' claimed invention and the applied prior art. These differences are discussed in greater detail below. Dependent claims 37, 51 and 52 have been amended to change dependency. Dependent claim 47 has been amended to properly include a period at the end of the claim. Dependent claims 40, 41, 42, 45 and 50 have been amended to provide additional clarity.

Claim Objections

The Office Action objected to claims 51 and 52 for improper dependency. These claims have been amended to address the problems identified in the Office Action, and are now consistent with the interpretation advanced in the Office Action.

Claim Rejections Under 35 U.S.C. § 102 and 35 U.S.C. § 103

The Office Action rejected claims 34, 36-38, 40-48 and 50-53 under 35 U.S.C. 102(e) as being anticipated by Bromba et al. (US 6,466,781 B1) (hereafter Bromba), and rejected claims 35, 39 and 49 under 35 U.S.C. 103(a) as being unpatentable over Bromba in view of Tushie et al (US 6,014,748) (hereafter Tushie).

The current claim amendments serve to more clearly distinguish Applicants' claimed invention relative to the applied references. Applicants respectfully traverse the rejections to the extent such rejections may be considered applicable to the claims as amended. The applied

Application Number 09/881,868
Docket: 010362
Responsive to Office Action mailed October 4, 2005

references fail to disclose or suggest the inventions defined by Applicants' claims, and provide no teaching that would have suggested the desirability of modification to arrive at the claimed invention.

The current claims are directed to a SIM (claims 34-37), a WCD (claims 38-77) and a computer readable medium (independent claim 48-53). All pending claims generally concern a security authorization process for gaining access to a SIM in a WCD, which is particularly applicable when the WCD implements a power management routine in which the SIM is powered down and then powered back up.

Conventionally, a user would be required to re-enter a unique identification code in order to gain access to the SIM. However, Applicants' disclosure has recognized that user convenience can be promoted by storing and reusing the unique identification code entered by the user in the security authorization process of the initial power up. In particular, in accordance with the claimed invention, the unique identifier entered by the user in response to a security authorization process at an initial power up is stored, and then automatically used again in a subsequent security authorization following a power down of the SIM by a power management routine.

While Bromba may disclose a security process in which a user enters a personal identification number (PIN) in order to gain access to a SIM, Bromba lacks any teaching or suggestion of the features of Applicants' claims that require storing a unique identifier entered by the user, and then automatically using the stored unique identifier again in a subsequent security authorization following a power down of the SIM by a power management routine. Similarly, Tushie also lacks any suggestion of such features.

Claim 34 recites a SIM adapted for and powered by a WCD, the WCD including a power management routine and a memory. The SIM comprises means for storing a first unique identifier, and means for receiving a second unique identifier from the WCD at an initial power up of the WCD, the second unique identifier being entered by a user of the WCD. The SIM also comprises means for accessing the first unique identifier at the initial power up of the WCD to compare the first unique identifier to the second unique identifier and to permit access to the SIM by the WCD based on the comparison, and means for automatically receiving the second unique identifier at a subsequent power up of the SIM without the user re-entering the second unique identifier following the SIM having been powered down under control of a power management routine performed by the WCD. In addition, the SIM comprises means for comparing the second

Application Number 09/881,868

Docket: 010362

Responsive to Office Action mailed October 4, 2005

unique identifier automatically received from the WCD to the first unique identifier following the subsequent power up, and means for enabling access of the SIM by the WCD based on the comparison following the subsequent power up.

Claim 38 recites a WCD including a power management routine and a memory. The WCD is adapted for use with a SIM, wherein the SIM stores a first unique identifier. The WCD comprises means for storing in the memory a second unique identifier generated in response to a user performing an initial power up of the WCD, wherein the second unique identifier is compared to the first unique identifier stored in the SIM to permit access to the SIM by the WCD following the initial power up, and means, responsive to the power management routine, for powering down the SIM following the initial power up. The WCD also includes means responsive to the power management routine for powering up the SIM following the powering down, means for automatically transmitting the second unique identifier to the SIM without the user re-entering the second unique identifier following the powering up by the means responsive to the power management routine, and means for detecting access to the SIM in response to the SIM matching the second unique identifier automatically transmitted from the WCD to the first unique identifier stored in the SIM.

Claim 48 recites a computer-readable medium comprising instructions, including a power management routine, stored thereon for causing a WCD including a memory and adapted for use with a SIM that stores a first unique identifier to store in the memory a second unique identifier generated in response to a user performing an initial power up of the WCD, wherein the second unique identifier is compared to the first unique identifier stored in the SIM to permit access to the SIM by the WCD following the initial power up. The instructions also cause the WCD to power down the SIM in response to the power management routine following the initial power up, power up the SIM in response to the power management routine following the power down, automatically transmit the second unique identifier to the SIM without the user re-entering the second unique identifier following the power up in response to the power management routine, and detect access to the SIM in response to the SIM matching the second unique identifier automatically transmitted from the WCD to the first unique identifier stored in the SIM.

The Office Action cited the Bromba reference as disclosing all of the features recited in the former independent claims. However, in view of the current claim amendments, Applicants

Application Number 09/881,868
Docket: 010362
Responsive to Office Action mailed October 4, 2005

believe that the current independent claims clearly distinguish Bromba (and Tushie) in a number of respects.

Neither Bromba nor Tushie discloses or suggests techniques in which a unique identifier entered by a user in response to an initial power up is stored and then applied at a subsequent power up, following a power down of the SIM as part of a power management routine of the WCD, without needing the user to re-entering unique identifier.

While the techniques of Bromba describe an authorization process in which a user enters a secret PIN, Bromba lacks any suggestion of storing the secret PIN entered by the user, much less subsequently using a stored PIN following a power management routine in which the SIM is powered down and then powered back up. For this reason, the pending claims should be in condition for allowance.

Furthermore, while Bromba mentions a second "off-state" of the device, Bromba indicates that power is supplied to the SIM during this second "off state." In this way, Bromba appears to describe the antithesis of Applicants' claims, which require a power down wherein power is not supplied to the SIM. In Bromba, it appears that the SIM is never powered down, in stark contrast to Applicants' claims, which specifically require power down of the SIM as part of the power management routine.

The techniques of Bromba further describe a biometric authorization process, but in this context, still lack any suggestion of storing a unique identifier entered by the user, stored, and then used again following a power management routine in which the SIM is powered down and then powered back up. Again, in Bromba, the SIM is not even powered down and powered back up insofar as Bromba teaches a second "off state" in which power is always supplied to the SIM, even when power is blocked to other components of the WCD.

Bromba indicates that in accordance with its techniques, it is not necessary for a user to enter the secret PIN again, following the second "off state" of the device. However, unlike Applicants' claims, Bromba avoids the need to re-enter a secret PIN because power is always supplied to the SIM, even during the second "off state." Again, in stark contrast to Bromba, Applicants' claims specifically require a power down of the SIM. Thus, Bromba actually teaches away from the features of Applicants' claims, which require storing of the unique identifier, and then applying the stored unique identifier at a subsequent power up of the SIM.

Application Number 09/881,868
Docket: 010362
Responsive to Office Action mailed October 4, 2005

Insofar as Bromba continually supplies power to the SIM, even in the second "power down," it appears that Bromba may completely avoid the issues addressed by the features of Applicants' claims. Bromba, however, requires a buffer capacitor to the SIM in order to achieve such continuous power. In accordance with Applicants' claimed invention, however, the need to provide continuous power to the SIM can be avoided. Instead, the claimed invention provides for power management in which the SIM is powered down, and promotes user convenience by not requiring a user to re-enter the unique identifier at a subsequent power up of the SIM.

Tushie lacks any teaching that would remedy the basic deficiencies of Bromba relative to Applicants' claims. In view of the foregoing comments, Applicants reserve further comment at this time. However, to the extent any claim limitations or alleged prior art teachings have not been addressed herein, Applicants do not acquiesce in the propriety of any characterization or position advanced in the Office Action with respect to such limitations or teachings. Rather, Applicants reserve further comment in light of the clear distinction of the claimed invention from the applied prior art, as discussed in the foregoing remarks.

Conclusion


All claims in this application are in condition for allowance. Applicants respectfully request reconsideration and prompt allowance of all pending claims. Please charge any additional fees or credit any overpayment to deposit account number 17-0026. The Examiner is invited to telephone the below-signed attorney to discuss this application.

Date:

12/12/05

QUALCOMM, Inc.
5775 Morehouse Drive
San Diego, CA 92121
Telephone: (858) 651-1306
Facsimile: (858) 658-2502

By:


Name: George Pappas
Reg. No.: 35,065